3.

(a) I chose to determine if the minimum temperature for Hastings, MI and Ålesund, Norge differed based on their relative latitudes. To accomplish this, I took the data for minimum temperature from climate-charts.com and divided each value by the latitude of their respective location (42.64596° and 62.47201°) to determine the weighted minimum temperature.

(b) The different graphs don’t represent the data differently, but the line graph does seem cleaner and does a better job at allowing people to interpolate data from within each month as itself.

(c)

|  |  |  |
| --- | --- | --- |
| Location | Mean (°Latitude/°c) | Standard Deviation |
| Hastings, mi  Ålesund, Norge | 0.06429  -0.20249 | 0.19861  0.22883 |

(d) Yes, because the mean weighted temperature from Ålesund, Norge is lower than that of Hastings, MI, it would be a fair conclusion that Ålesund, Norge is colder because of its greater latitude.